

Level 4 Curriculum Map

	Unit Focus Topics	Unit Details
Unit 1	<ul style="list-style-type: none">- Single Digit Multiplication 1 - 5- Fractions on Number Line	The goal of this unit is to fluent calculation of single digit multiplication problems for digits 1 - 5. This unit also teaches identifying fractions on a number line. Students will practice breaking down a number line into sections for a range of types of fractions and identifying the correct location for the corresponding fraction. This unit will focus on teaching the concept of fractions as a portion of a whole number.
Unit 2	<ul style="list-style-type: none">- Single Digit Multiplication 6 - 9- Fraction Equivalence	The goal of this unit is to fluent calculation of single digit multiplication problems for digits 6 - 9. This unit also teaches fraction equivalence for both fractions with the same and different denominators. The meaning of equivalence will be taught along with three methods for determining equivalence: draw it, number line, or multiplication method. Students will use the range of these methods to determine fraction equivalence in a range of scenarios.
Unit 3	<ul style="list-style-type: none">- Double X Single Digit Multiplication- Compare Size of Fractions	The goal of this unit is to master the method for completing double by single digit multiplication problems through a range of examples and practice. This unit also teaches how to compare fractions with both the same and different denominators and identify fractions as greater than or equal to. This unit focuses on using visuals (drawing or number line) to show which fraction is larger or smaller.
Unit 4	<ul style="list-style-type: none">- Double X Double Digit Multiplication- Multiplication Word Problems	The goal of this unit is to master the method for completing double by double digit multiplication problems through a range of examples and practice. This unit also focuses on teaching the practical application of multiplication through completing multiplication based word problems. Students will learn the method for approaching these types of word problems as well as how to identify a word problem that requires multiplication.

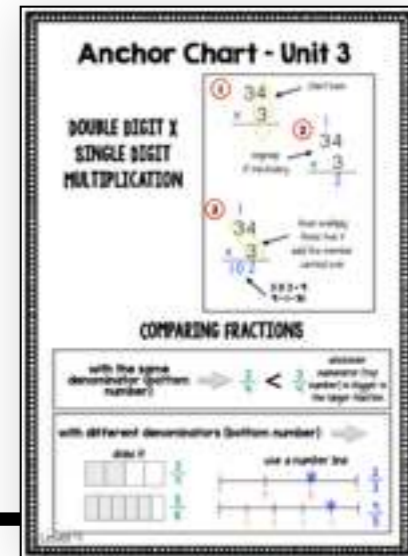
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Unit 5	<ul style="list-style-type: none">- Single Digit Division 1 - 10- Area	<p>The goal of this unit is to fluent calculation of single digit division problems for digits 1 - 9 as well as introduce the concept of division. This unit also teaches the definition and concept of area as well as how to calculate the area of a square or rectangle shape. Students will calculate the area of a wide range of examples throughout the unit.</p>
Unit 6	<ul style="list-style-type: none">- Double by Single Digit Division with no Remainders- Perimeter	<p>The goal of this unit is to master the method for completing double by single digit division problems through a range of examples and practice. This unit teaches the methods of drawing, repeated subtraction, or reverse multiplication facts for solving simple division problems. This unit also teaches the definition and concept of perimeter as well as how to calculate the perimeter of a square or rectangle shape. Students will calculate the perimeter of a wide range of examples throughout the unit.</p>
Unit 7	<ul style="list-style-type: none">- Long Division with no Remainders- Area & Perimeter Word Problems	<p>The goal of this unit is to master the method for completing long division problems with no remainders through a range of examples and practice. This unit also focuses on teaching the practical application of area and perimeter through completing word problems. Students will learn the method for approaching these types of word problems as well as how to identify a which problems require area and which require perimeter.</p>
Unit 8	<ul style="list-style-type: none">- Long Division with Remainders- Division Word Problems	<p>The goal of this unit is to master the method for completing long division problems with remainders through a range of examples and practice. This unit also focuses on teaching the practical application of division through completing division based word problems. Students will learn the method for approaching these types of word problems as well as how to identify which problems require the use of division.</p>

8 Units + a Review Unit

EACH UNIT CONTAINS:

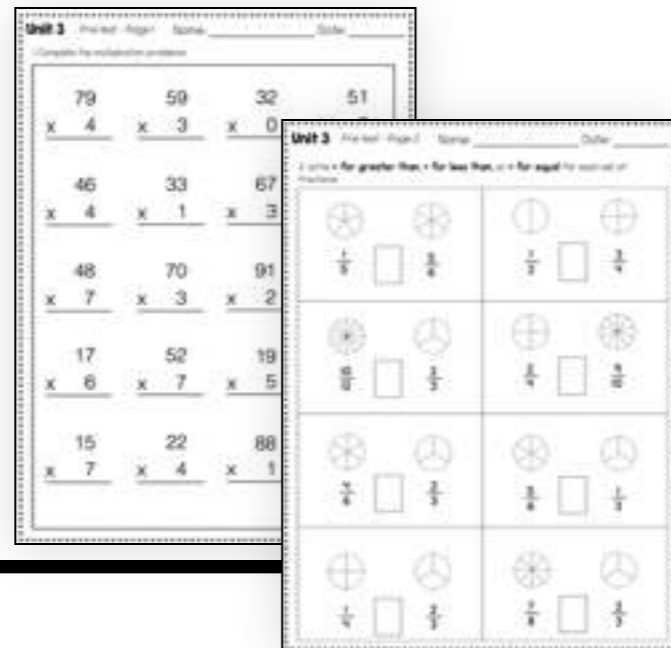
anchor chart



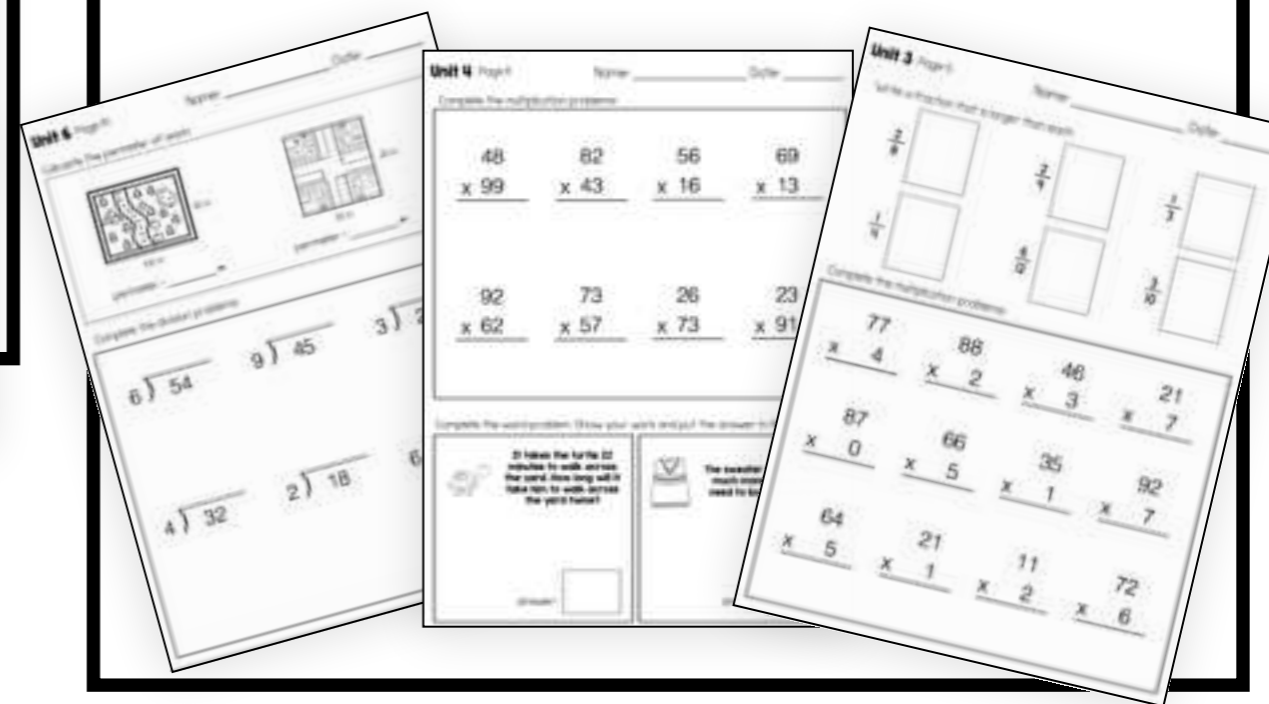
grading rubric

Unit 1 Rubric & Grading Instructions			
Name	Date	Score	Teacher
1. Complete the multiplication problems. Count each problem as either correct or incorrect.			20
2. Fill in the missing fraction on each number line. Count each line as correct or incorrect. Only count as correct if both numbers in the fraction are correct and the answer is written in the space provided.			7
3. Put a dot on the number line according to the fraction. Count each number line as correct or incorrect. Count as correct if there is only one dot and the dot is in the correct location on the number line.			7
Analyzing the Errors The pre-test is used as a baseline to see where the student is starting out before any instruction is given. Errors on the pre-test will be addressed through the unit activities. Errors on the post-test indicate that additional instruction or practice is needed. Every student begins at different places. Here is where this student needs more work:		26	
Error Summary	Weak Performances	Suggested Grades	
None	100% correct	A	
1-2	75-99% correct	B	
3-4	50-74% correct	C	
5-6	25-49% correct	D	
7-8	0-24% correct	F	

pre-test & post-test



20 activities



Anchor Charts

Anchor Chart - Unit 1

SINGLE DIGIT MULTIPLICATION (1 - 5)

multiplication chart

	2	3	4	5
2	4	6	8	10
3	6	9	12	15
4	8	12	16	20
5	10	15	20	25

*all numbers X 0 = 0
*all numbers X 1 = the number

FRACTIONS ON A NUMBER LINE

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Anchor Chart - Unit 2

SINGLE DIGIT MULTIPLICATION (6 - 9)

multiplication chart

	6	7	8	9
2	12	14	16	18
3	18	21	24	27
4	24	28	32	36
5	30	35	40	45
6	36	42	48	54
7	42	49	56	63
8	48	56	64	72
9	54	63	72	81

EQUIVALENT FRACTIONS

Equivalent means equal! Two fractions are equivalent if they show the same amount or are at the same point on the number line.

Check:
- draw it
- put it on a number line
- multiply

Level 4

Anchor Chart - Unit 3

DOUBLE DIGIT X SINGLE DIGIT MULTIPLICATION

COMPARING FRACTIONS

with the same denominator (bottom number) → $\frac{2}{4} < \frac{3}{4}$ whichever numerator (top number) is bigger is the larger fraction

with different denominators (bottom number) → draw it, use a number line

Level 4

Anchor Chart - Unit 4

2 Digit X 2 Digit Multiplication

MULTIPLICATION WORD PROBLEMS

- Read the problem.
- Underline the question.
- Circle the important numbers/info.
- Show your work and solve.

times each in all product area
multiple triple double twice

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Anchor Chart - Unit 5

SINGLE DIGIT DIVISION (1 - 9)

to split into equal groups

$4 \div 2 = 2$ $8 \div 2 = 4$
 $6 \div 2 = 3$ $8 \div 4 = 2$
 $6 \div 3 = 2$ $9 \div 3 = 3$

*all numbers $\div 1 =$ the number
*all numbers \div the same number = 1

AREA the measurement of space, the number of square units inside of a shape or object.

count the squares $3 \times 3 = 9$
length X width = area

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Anchor Chart - Unit 6

DIVISION

$20 \div 4 = 5$

Division Strategies:

- Draw a picture.
- Use repeated subtraction.
- Use multiplication facts.

PERIMETER the measurement around the outside of a shape or object

add all of the sides together

$4 + 4 + 3 + 3 = 14$
 $2 + 2 + 2 = 6$

Level 4

Anchor Chart - Unit 7

LONG DIVISION WITH NO REMAINDERS

Remainder: the leftovers after completing a division problem

Long Division Steps (no remainder)

- Divide
- Multiply
- Subtract
- Bring Down
- Repeat

AREA & PERIMETER WORD PROBLEMS:

area = length X width
 perimeter = width + width + length + length

Level 4

Anchor Chart - Unit 8

LONG DIVISION WITH REMAINDERS

Remainder: the leftovers after completing a division problem

Long Division Steps (with remainder)

- Divide
- Multiply
- Subtract
- Bring Down
- Repeat & Add Remainders

DIVISION WORD PROBLEMS

- Read the problem.
- Underline the question.
- Circle the important numbers/info.
- Show your work and solve.

divide split broken into how many groups shared equally half cut up

Level 4

Grading Rubric

Unit 8 Rubric & Grading Instructions

Name: _____ Date: _____ (circle one) Pre-test Post-test

	correct	incorrect
1. Complete the division problems. Count each problem as either correct or incorrect.		
2. Complete each division word problem. Count only the answer in the box as correct or incorrect. The answer must be in the answer box to be counted as correct.		
	total correct	total incorrect
	total possible	percentage
	16	

Analyzing the Errors:

The pre-test is used as a baseline to see where the student is starting out before any instruction is given. Errors on the pre-test will be addressed through the unit activities. Errors on the post-test indicate that additional instruction or practice is needed. Every student learns at different rates! Here is where this student needs more work:

Error Numbers	Needs Practice on...	Suggested Activities
many errors on 1	still needs work on long division with remainders	review incorrect problems to determine if it is a systems error (mistake is made on how the problem is completed) or an operations error (mistake is made by dividing numbers incorrectly) - for systems errors review chart before each problem and for operations errors review div flashcards
many errors on 2	still needs work on division word problems	review the work shown to see if it is a systems or operation error (see above), for systems error - review together how to determine the solve for a variety of word problems.

Unit 4 Rubric & Grading Instructions

Name: _____ Date: _____ (circle one) Pre-test Post-test

	correct	incorrect	total possible
1. Complete the multiplication problems. Count each problem as either correct or incorrect.			12
2. Complete each multiplication word problem. Count only the answer in the box as correct or incorrect. The answer must be in the answer box to be counted as correct.			4
	total correct	total incorrect	
	total possible	percentage	
	16		

Analyzing the Errors:

The pre-test is used as a baseline to see where the student is starting out before any instruction is given. Errors on the pre-test will be addressed through the unit activities. Errors on the post-test indicate that additional instruction or practice is needed. Every student learns at different rates! Here is where this student needs more work:

Error Numbers	Needs Practice on...	Suggested Activities
many errors on 1	still needs work on double times double digit multiplication	review incorrect problems to determine if it is a systems error (mistake is made on how the problem is completed) or an operations error (mistake is made by multiplying numbers incorrectly) - for systems errors review anchor chart before each problem and for operations errors review multiplication flashcards
many errors on 2	still needs work on multiplication word problems	review the work shown to see if it is a systems or operation error (see above), for systems error - review together how to determine the problem to solve from a variety of word problems

total correct divided by total possible times 100

Pre-Test & Post-Test









Unit 2 Post-test - Page 1 Name: _____ Date: _____

1. Complete the multiplication problems:

$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$
$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 7 \\ \hline \end{array}$
$\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 5 \\ \hline \end{array}$
$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$
$\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$

Unit 2 Post test - Page 2 Name: _____ Date: _____

2. Write an equivalent fraction for each:

 $\frac{3}{12} = \underline{\quad}$	 $\frac{1}{5} = \underline{\quad}$
 $\frac{2}{3} = \underline{\quad}$	 $\frac{1}{2} = \underline{\quad}$
 $\frac{1}{2} = \underline{\quad}$	 $\frac{3}{5} = \underline{\quad}$
 $\frac{1}{3} = \underline{\quad}$	 $\frac{3}{6} = \underline{\quad}$

20 Activities

Unit 3 Page 1
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 45 \\ 5 \end{array}$	$\begin{array}{r} 56 \\ 6 \end{array}$	$\begin{array}{r} 34 \\ 2 \end{array}$	$\begin{array}{r} 73 \\ 2 \end{array}$
----------------------------------------	----------------------------------------	----------------------------------------	----------------------------------------

Unit 3 Page 2
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{3}$	$\frac{3}{4}$	$\frac{2}{4}$
$\frac{3}{5}$	$\frac{4}{5}$	$\frac{1}{4}$	$\frac{3}{4}$

Unit 3 Page 3
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 25 \\ 4 \end{array}$	$\begin{array}{r} 90 \\ 2 \end{array}$	$\begin{array}{r} 67 \\ 2 \end{array}$
----------------------------------------	----------------------------------------	----------------------------------------

Unit 3 Page 4
Name _____ Date _____
Write a fraction that is smaller than each:

$\frac{8}{4}$	$\frac{4}{5}$
$\frac{2}{3}$	$\frac{8}{4}$

Unit 3 Page 5
Name _____ Date _____
Write a fraction that is larger than each:

$\frac{2}{8}$	$\frac{2}{4}$
$\frac{1}{4}$	$\frac{6}{12}$

Unit 3 Page 6
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 77 \\ 4 \end{array}$	$\begin{array}{r} 88 \\ 2 \end{array}$	$\begin{array}{r} 46 \\ 3 \end{array}$
$\begin{array}{r} 87 \\ 0 \end{array}$	$\begin{array}{r} 66 \\ 5 \end{array}$	$\begin{array}{r} 35 \\ 1 \end{array}$

Unit 3 Page 7
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{6}$	$\frac{2}{3}$	$\frac{1}{6}$
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Unit 3 Page 8
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{6}$	$\frac{2}{3}$	$\frac{1}{6}$
---------------	---------------	---------------

Unit 3 Page 9
Name _____ Date _____
Write a fraction that is smaller than each:

$\frac{8}{4}$	$\frac{4}{5}$
$\frac{2}{3}$	$\frac{8}{4}$

Unit 3 Page 10
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{6}$	$\frac{2}{3}$	$\frac{1}{6}$
---------------	---------------	---------------

Unit 3 Page 11
Name _____ Date _____
Use the number line to show which fraction is bigger.

$\frac{2}{4}$	$\frac{2}{3}$
$\frac{5}{7}$	$\frac{3}{6}$







Unit 3 Page 12
Name _____ Date _____
Use the number line to show which fraction is bigger.

$\frac{2}{4}$	$\frac{2}{3}$
$\frac{5}{7}$	$\frac{3}{6}$

Unit 3 Page 13
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{6}$	$\frac{2}{3}$	$\frac{1}{6}$
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Unit 3 Page 7
Name _____ Date _____
Circle which is smaller in each set:

Unit 3 Page 8
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 34 \\ 1 \end{array}$	$\begin{array}{r} 37 \\ 3 \end{array}$	$\begin{array}{r} 21 \\ 3 \end{array}$	$\begin{array}{r} 11 \\ 8 \end{array}$
----------------------------------------	----------------------------------------	----------------------------------------	----------------------------------------

Unit 3 Page 10
Name _____ Date _____
Circle the fraction that is smaller:

	$\frac{1}{3}$		$\frac{1}{4}$		$\frac{1}{2}$
	$\frac{1}{2}$		$\frac{2}{3}$		$\frac{2}{4}$
	$\frac{3}{4}$		$\frac{1}{3}$		$\frac{2}{3}$

Unit 3 Page 11
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 23 \\ 3 \end{array}$	$\begin{array}{r} 83 \\ 0 \end{array}$	$\begin{array}{r} 31 \\ 4 \end{array}$	$\begin{array}{r} 10 \\ 2 \end{array}$
$\begin{array}{r} 91 \\ 9 \end{array}$	$\begin{array}{r} 70 \\ 5 \end{array}$	$\begin{array}{r} 19 \\ 4 \end{array}$	$\begin{array}{r} 35 \\ 1 \end{array}$

Unit 3 Page 12
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 26 \\ 6 \end{array}$	$\begin{array}{r} 14 \\ 2 \end{array}$	$\begin{array}{r} 67 \\ 9 \end{array}$	$\begin{array}{r} 21 \\ 4 \end{array}$	$\begin{array}{r} 90 \\ 2 \end{array}$
----------------------------------------	----------------------------------------	----------------------------------------	----------------------------------------	----------------------------------------

Unit 3 Page 13
Name _____ Date _____
Circle which is larger in each set:

			
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Unit 3 Page 10
Name _____ Date _____
Write a fraction that is larger than each:

$\frac{2}{12}$	$\frac{2}{10}$
$\frac{1}{4}$	$\frac{2}{6}$

Unit 3 Page 11
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$

Unit 3 Page 12
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$

Unit 3 Page 13
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$

Unit 3 Page 5
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 53 \\ 5 \end{array}$	$\begin{array}{r} 20 \\ 3 \end{array}$	$\begin{array}{r} 45 \\ 1 \end{array}$	$\begin{array}{r} 21 \\ 5 \end{array}$
----------------------------------------	----------------------------------------	----------------------------------------	----------------------------------------

Unit 3 Page 6
Name _____ Date _____
Write a fraction that is smaller than each:

$\frac{10}{12}$	$\frac{4}{6}$	$\frac{4}{5}$
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Unit 3 Page 7
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$

Unit 3 Page 8
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$







Unit 3 Page 9
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$

Unit 3 Page 10
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$
$\frac{3}{4}$	$\frac{1}{2}$
$\frac{3}{4}$	$\frac{3}{4}$

Unit 3 Page 20
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

	$\frac{2}{12}$		$\frac{1}{3}$		$\frac{3}{4}$
	$\frac{1}{2}$		$\frac{4}{10}$		$\frac{4}{6}$

Unit 3 Page 21
Name _____ Date _____
Write a fraction that is larger than each:

$\frac{2}{12}$	$\frac{1}{10}$	$\frac{2}{5}$	$\frac{1}{4}$	$\frac{2}{8}$	$\frac{3}{4}$
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Unit 3 Page 22
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{5}$	$\frac{1}{4}$	$\frac{2}{8}$	$\frac{3}{4}$
---------------	---------------	---------------	---------------

Unit 3 Page 23
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{2}{3}$	$\frac{1}{4}$	$\frac{5}{6}$
$\frac{1}{3}$	$\frac{2}{5}$	$\frac{3}{4}$

Unit 3 Page 24
Name _____ Date _____
Complete the multiplication problems:

$\begin{array}{r} 35 \\ 0 \end{array}$	$\begin{array}{r} 62 \\ 2 \end{array}$	$\begin{array}{r} 22 \\ 9 \end{array}$	$\begin{array}{r} 11 \\ 5 \end{array}$
----------------------------------------	----------------------------------------	----------------------------------------	----------------------------------------

Unit 3 Page 25
Name _____ Date _____
Write > for greater than, < for less than, or = for equal for each set of fractions.

$\frac{11}{2}$	$\frac{51}{6}$	$\frac{21}{5}$
----------------	----------------	----------------